

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

Claims 1-2 (canceled).

3. (currently amended) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim [[2]] 21, wherein a terminal of said polyoxyalkylene chain of the polysiloxane-polyoxyalkylene copolymer is constituted by hydroxyl group.

4. (currently amended) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim [[20]] 21, wherein the polyol moiety is constituted by polyether polyol.

5. (currently amended) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim [[2]] 21, wherein the polyol moiety is constituted by polyether polyol.

6. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 3, wherein polyol moiety is constituted by polyether polyol.

7. (currently amended) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim [[20]] 21, wherein the polyol moiety is constituted by polyurethane prepolymer to be synthesized through a reaction between polyether polyol and isocyanate compound.

8. (currently amended) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim [[2]] 21, wherein the polyol moiety is constituted by polyurethane prepolymer to be synthesized through a reaction between polyether polyol and isocyanate compound.

9. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 3, wherein the polyol moiety is constituted by polyurethane prepolymer to be synthesized through a reaction between polyether polyol and isocyanate compound.

10. (currently amended) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim [[20]] 21, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

11. (currently amended) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim [[2]] 21, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

12. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 3, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

13. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 4, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

14. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 5, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

15. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 6, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

16. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 7, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

17. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 8, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

18. (original) The method of manufacturing a low air-permeability flexible polyurethane foam block according to claim 9, wherein a hydrocarbon compound which is excellent in fluidity is further employed as an additive.

19. (currently amended) A low air-permeability flexible polyurethane foam block which is formed through a method claimed in any one of claims ~~[[20]]~~ 21 and ~~[[2]]~~ 3 to 18, said flexible polyurethane foam block being useful as a cushioning material, a sound absorbing material, an air-sealing material or a water sealing material.

Claim 20 (canceled).

21. (new) A method of manufacturing a low air-permeability flexible polyurethane foam block through an employment of at least a polyol, an isocyanate compound, a catalyst, a foaming agent and a foam stabilizer without accompanying an opening cells step, called healthy bubble, said method being featured by comprising:

forming a mixture by stirring and mixing raw materials; and
foaming the mixture and making cells intercommunicate to each other, thereby manufacturing the low air-permeability flexible polyurethane foam block,

and featured in that the foam stabilizer is formed of polysiloxane-polyoxyalkylene copolymer containing a functional group capable of chemically bonding to an isocyanate group at a terminal of polyoxyalkylene chain, the polyoxyalkylene chain having a number average molecular weight ranging from 400 to 1000, and a weight ratio between ethylene oxide and propylene oxide in the polyoxyalkylene chain being in a range of 70/30 to 0/100, and

that foam thus obtained has an air-permeability of no more than 5 cc/cm²/sec at a thickness of 10 mm and a variation in air-permeability throughout the entire body thereof is confined to not more than 1 cc/cm²/sec.